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# From Ego Centric to Eco Centric

What can we do to make Sustainable Development happen where we live?





## Some Ground rules for the presentation

1. Have your camera on at all times, but mute your speaker when the presentation is going on.
2. Respect the presenters and each others viewpoint.
3. Have a journal present or open a file where you can take notes.
4. Use the jamboard if you have questions:  
[https://jamboard.google.com/d/1TAs6yLGHhu\\_S8G5FIAzogAEtTF9K0rhKQ0499V6c264/edit?usp=sharing](https://jamboard.google.com/d/1TAs6yLGHhu_S8G5FIAzogAEtTF9K0rhKQ0499V6c264/edit?usp=sharing)



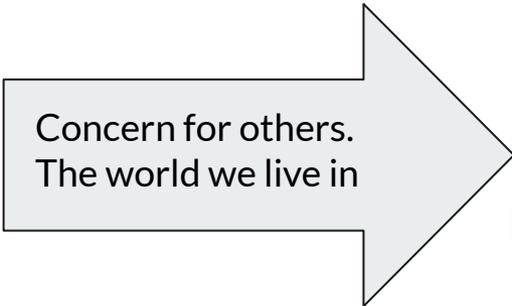
## **Time for some introductions**

You have been put in a breakout room with students from other schools

Introduce yourselves to the others in the groups, telling them your names, where you go to school and what you hope to come from this workshop



## Transition in thinking and acting



Concern for others.  
The world we live in





# What is my personal impact on the world now?

Time to calculate my own ecological footprint

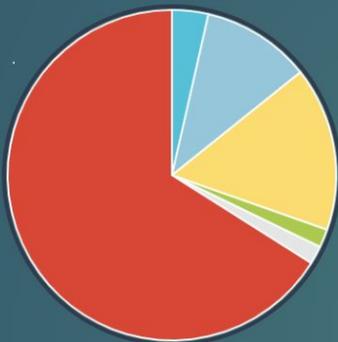
<https://www.footprintcalculator.org/>

This will tell you how long it will take you within a year to consume your share of the earth's resources?

It will also tell you how many hectares of land are needed to support your lifestyle

It will tell you how many tonnes of CO2 you are responsible for emitting into the atmosphere?

## By Land Type



- Built-Up Land
- Forest Products
- Cropland
- Grazing Land
- Fishing Grounds
- Carbon Footprint

## By Consumption Category



5.5

Your Ecological Footprint

(global hectares or gha)



10.6

Your Carbon Footprint

(CO<sub>2</sub> emissions in tonnes per year)

67

Your Carbon Footprint

(% of your total Ecological Footprint)



## **What changes would you need to personally make?**

My own biggest issue would be travelling by air to my home country (Australia-pre covid) and also regularly flying to do work.

That has changed since Covid and I would now consume 2 Earths/year



# What do we mean by Sustainable Development?

The Brundtland Report “1987”

This defines sustainable development as "Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs."



## **What does this mean?**

What problems can you see with this definition?

At last count there have 50 different definitions of this word

## An Agreement about Sustainability

One point in which people can agree about sustainability is that it contains three different Inter-related elements: Social, Economic and Environmental



# **Some things that are agreed upon for a Sustainable Future**

- a....to know that “our health, well being and ultimately survival depends on working with, not against natural forces”**
- b. To have an understanding of the scope and speed of our current crisis and a familiarity with the vital signs of the planet and its ecosystems.**
- c. to have a historical understanding of how we have become so destructive.**
- d.to take a practical and participatory approach: “The study of environmental problems is an exercise in despair, unless it is regarded as a preface to the study, design and implementation of solutions”**



# SUSTAINABLE DEVELOPMENT GOALS

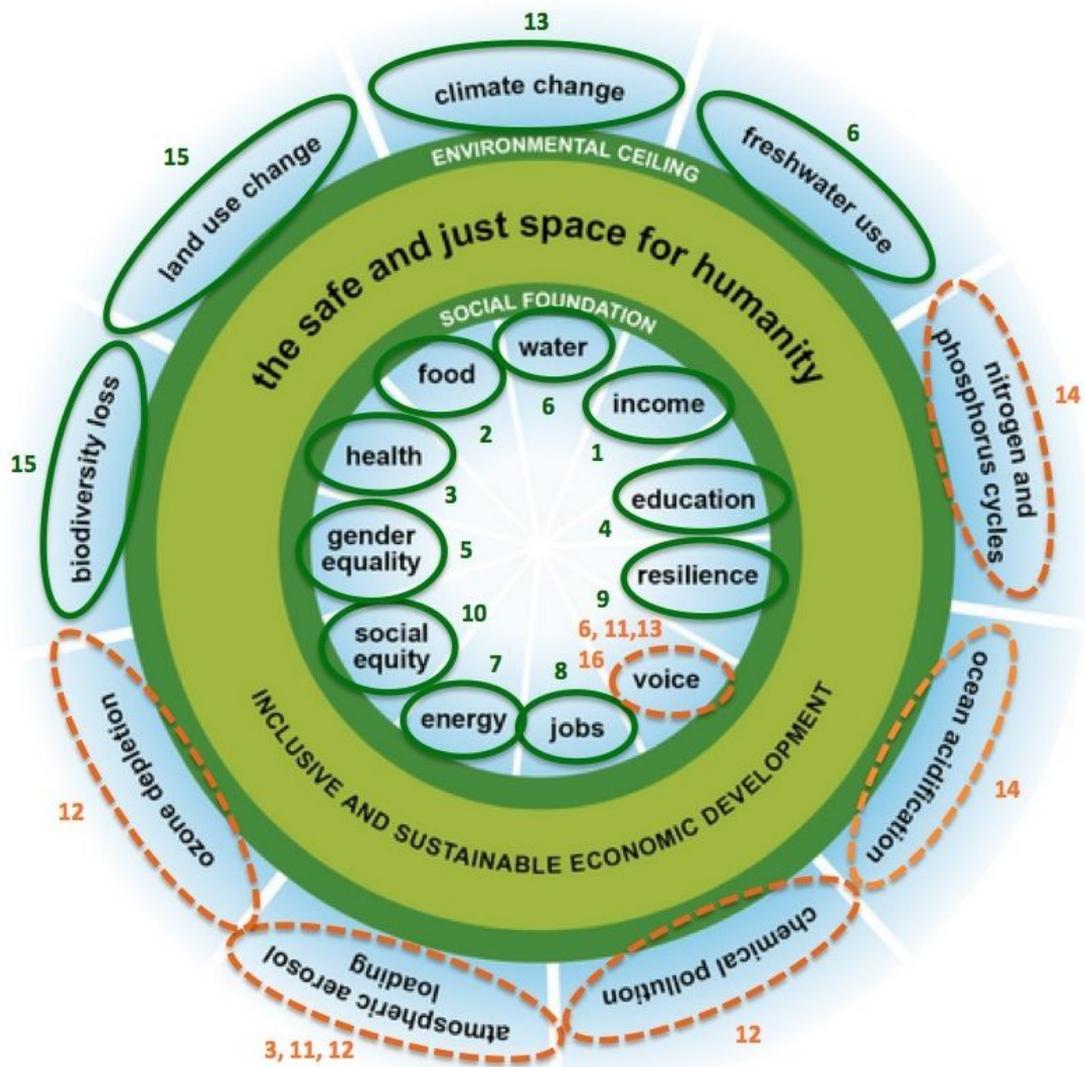




## **Classify the goals- individually then pair-share**

Make a chart with three headings Economic/Social/ Environmental

Classify the SDG's, which group do they fit into?



**SUSTAINABLE DEVELOPMENT GOALS**





## **The relationships between the SDGs are complex**

The SDG's are inter-related so that means many of the issues become very complicated to solve (These are referred to as wicked problems)

Let us look at the relationship between Food, Water and Energy

This is known as the Nexus

Look at the SDG's and explore the factors affecting FOOD, WATER and ENERGY

Using <https://www.classtools.net/hexagon/>, Create Hexagons for FOOD, WATER and ENERGY and the factors affecting each of them

## 1. Title:

## 2. Introduction / Instructions for students

HEXAGON ESSAY-PLANNING TOOL.

DRAG and DROP these hexagons into categories of your choice.

You can color-code hexagons, and can create new hexagons (e.g. as titles for each group) by double-clicking anywhere on the canvas.

When you are finished, you can use your work as the basis of an essay plan, presentation or project!

## 3. Hexagons Text: separate each with a newline





**Upload your hexagons to**

[https://jamboard.google.com/d/1TAs6yLGHhu\\_S8G5FI-AzogAEtTF9K0rhKQ0499V6c264/edit?usp=sharing](https://jamboard.google.com/d/1TAs6yLGHhu_S8G5FI-AzogAEtTF9K0rhKQ0499V6c264/edit?usp=sharing)



# What is your project?

What is the Problem you wish to address?

Air Pollution

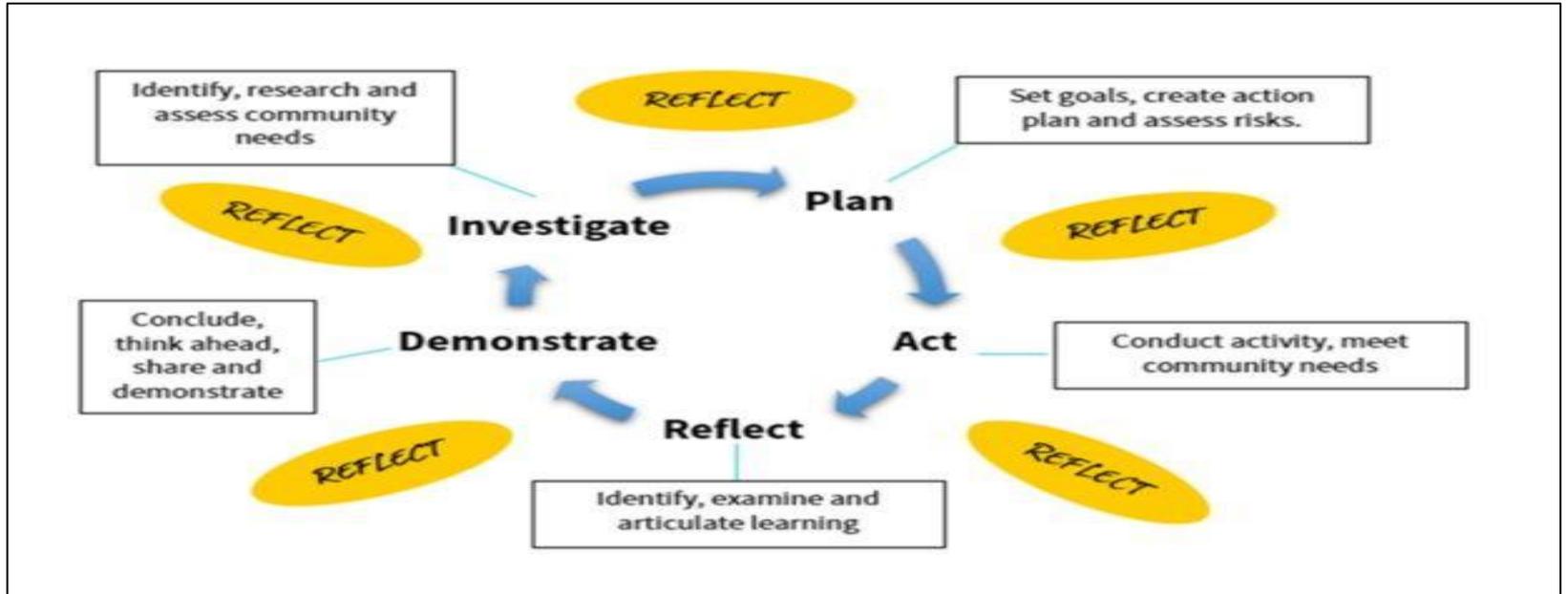
Climate action-reduce global warming

The Circular Economy-recycling

Digitalisation-

The disposal of waste including plastic

# The Design Cycle





## **In a group -brainstorm some of the issues**

Using <https://www.classtools.net/hexagon/>, brainstorm all the factors that you can think of that relate to that issue



## How are you going to plan for success?

1. You need to carry out some research into the area that you wish to **investigate and develop a plan**
  - a. Who or what do you wish to research?
  - b. What method will you use (Survey, Interview, observation, camera study, focus group, etc)
  - c. How big will your sample be?
  - d. Who will you target?
  - e. What information do you expect this source to give you?

An important question to ask yourself: Why is this the correct source to approach/ why is this the correct method to use? (you might use the iceberg model)



Above the surface you see the  
**Symptoms**  
of the problem

Dig deeper to find the  
**Root Cause**  
of the problem

STEPS TO CONDUCT

# Root Cause Analysis

A SYSTEMATIC ANALYSIS TO UNCOVER THE FUNDAMENTAL OR DEEP-SEATED CAUSES OF AN INCIDENT, FAILURE, OR PROBLEM

STEP 1



Define the problem (or areas of improvement)

STEP 2



Assemble as much data and inputs as possible.

STEP 3



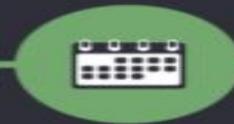
Locate the 'root' causes

STEP 4



Find 'Corrective' and 'Preventive' solutions

STEP 5



Create actionable strategies to implement the solution

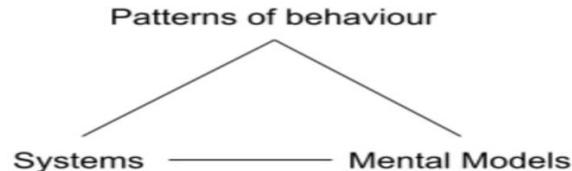
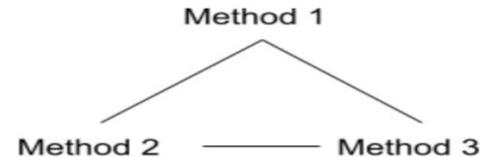
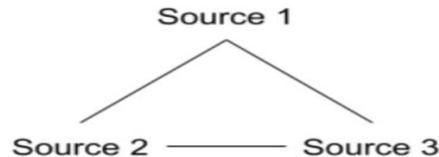
STEP 6



Monitor the solution and confirm if it works

# How do you make sure that the information is reliable? (Triangulation)

- Have you included varied data sources (primary and secondary)?
- Varied methods (interview, survey, observation, etc)?
- Varied types of information that address the layers of the Iceberg Model
- 



# What skill sets do I need to develop to carry out investigation?

1. Planning an interview
2. Developing a questionnaire/survey
3. How to make a call to adults
4. Writing appropriate emails
5. Developing a Gant chart to plan projects



## **Building a Gant Chart (used for business projects)**

Steps to build a Gant chart

1. Define desired results and a total time for the project
2. List individual tasks that need to be finished
3. Assign the task order, relationship to other tasks, and time frames
4. Assign responsibility for each task
5. Build a Gant chart